

ABSTRACT

It is an object of the invention to enable fine processing of not only a pole tip but a top pole layer to submicron measurement among the top pole which is divided into two. In the invention, the top pole is divided to the pole tip and the top pole layer, and a pole tip is formed on the flat surface of a bottom pole with a write gap layer in between. Through this, the pole tip which controls a recording track width is processed to submicron measurement. An insulating layer is formed in a region adjacent to the pole tip. A first layer of thin film coil is formed in a region where the insulating layer is formed. The thin film coil is covered by the insulating layer whose surface is flattened. As a result, difference in height of an apex area including a thin film coil becomes less for the size of (first layer of) thin film coil comparing to that of the related art. Accordingly, an effect of difference in height of the apex area is decreased when the top pole layer is formed by photolithography. As a result, micronizing the top pole layer to submicron measurement becomes possible.

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